

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named

Inventor : Michael Seltzer et al.

Appln. No.: 10/647,586

Filed : August 25, 2003

For : METHOD AND APPARATUS USING
HARMONIC-MODEL-BASED FRONT
END FOR ROBUST SPEECH
RECOGNITION

Docket No.: M61.12-0550

Group Art Unit: 2626

Examiner: Shah

INTERVIEW SUMMARY

**Electronically Filed on October
18, 2007**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Sir:

An interview was held between Theodore M. Magee, Examiner Shah and Supervisory Examiner Edouard. During the interview, the amendment to claim 13 made in the Amendment After Final was discussed to determine if it overcame the existing prior art. Applicants' representative indicated that claim 13 differed from Gao in that in claim 13, a different scaling value is used for the harmonic component than the scaling value for the random component. Under Gao, however, the gain factor, G_r , is the same for the harmonic component and the random component in a frame. Thus, a single gain factor is used for both the harmonic component and the random component in a frame. Examiner Shah indicated that he thought that this distinction overcame the currently cited references.

Claim 1 was also discussed. Applicants' representative pointed out that claim 1 was distinct from Gao because claim 1 uses a ratio of the energy of the harmonic component without the random component to an energy of a noisy speech signal whereas Gao in paragraphs 25 and 26 provide a gain factor that is the ratio of a signal composed of both a harmonic component and a random component over a noisy speech signal. Thus, in Gao, unvoiced speech

would be present in the numerator of the gain factor whereas in claim 1, such unvoiced speech would not be present in the numerator since the numerator only provides the energy of the harmonic component.


Examiners Shah and Edouard suggested adding the limitation "without the random component" to claim 1 if it was supported by the specification. Examiner Edouard also suggested adding language from page 16 of the present application to claim 1.

Examiner Shah and Edouard graciously agreed to call Applicants' representative after filing of the RCE and performance of a new search to discuss what amendments could be made to the claims to place them in form for allowance should the current amendments be insufficient.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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TMM:sew